Managing Winter Feeding Areas

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Winter feeding areas are a recipe for mud. They are high traffic areas in which the hooves of the cattle loosen the topsoil and compact the soil below. When water and manure is added to this loose soil a mud hole forms. "An improperly managed winter feeding area is easy to find on many operations and a terrible place to feed cattle," says Teresa Dvorak, Livestock Nutrient Management Specialist with the NDSU Dickinson Research Extension Center. "This is the area that gets muddy first and stays muddy the longest."

If cattle are confined in this area for more than 45 days each year and the area does not support vegetative growth the North Dakota Department of Health (NDDoH) considers this an animal feeding operation (AFO). Therefore, the operation is bound by the NDDoH AFO rules. Dvorak says producers should consider alternative management of this feeding area to avoid the operation from falling under these rules. Properly managed winter feeding areas can be an asset to your operation if overused muddy areas are avoided.

Winter feeding of cattle on cropland adjacent to the old feeding area is becoming a more common practice in North Dakota. This practice allows the cattle to move into the old feeding area for water and occasional shelter, but the feeding takes place out on the cropland. The cropland is often referred to as a sacrifice area, but does not need to become this if properly managed. By reducing the intensity of the cattle in one area producers can mitigate problems.

When designing or selecting a winter feeding area several items must be considered. Cropland adjacent to the current feeding area allows the producer to move the cattle off the cropland when excessively wet. The field should have easy access to hay yards and a water source. Allow adequate area per animal to avoid overcrowding. The specific feeding area within the field should be moved frequently to avoid three main issues. The first problem that occurs is a heavy build up of wasted feed. This can cause problems for some no-till drills in the spring and can delay plant emergence. The second problem is the concentration of manure deposited in one area. The manure can be more evenly distributed across the field if the feeding area is moved around the cropland. The final problem that may be observed is compaction. This can lead to muddy areas again and issues with spring planting.

Winter feeding area management must also consider the remaining congregation area and proximity to surface water. Permanent congregation areas (water access) will lead to a concentration of manure. Accumulated manure must be removed in a timely manner and properly applied to cropland. This non-vegetated area is more prone to runoff and erosion. Therefore, a grassed buffer area must exist between this area and surface water or a draw/drainageway running into surface water.

Properly managed winter feeding areas contain the nutrients and pollutants produced on the operation, reduce soil erosion, keep clean water clean and help improve the environment. For more information on the proper management of winter feeding areas contact Teresa Dvorak at (701) 483-2348 ext. 108 or Teresa.dvorak@ndsu.edu.